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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,008	07/25/2003	Angel Stoyanov	25297	3946
28624	7590	09/30/2004	EXAMINER	
WEYERHAEUSER COMPANY INTELLECTUAL PROPERTY DEPT., CH 1J27 P.O. BOX 9777 FEDERAL WAY, WA 98063			CHIN, PETER	
			ART UNIT	PAPER NUMBER
			1731	

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/628,008

Applicant(s)

STOYANOV ET AL.

Examiner

Peter Chin

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

### DETAILED ACTION

1. Claims 1-3,6-7,9,10,13,15,16,19 and 20 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jewell et al (6,207,278) and if necessary Jewell et al (6,551,706 a continuation of 6,207,278).

Jewell et al ('278) discloses the claimed invention. While the examples in Jewell et al ('278) use a mixture of glyoxal and a glycol, the disclosure states that the glycol is merely optional, being present in an amount of up to 2%, column 2, lines 31-37. This range includes zero amounts as the lower limit. Thus Jewell et al anticipates the claimed invention or at the least it would have been obvious to omit the glycol since it is merely optional. If additional evidence is necessary to show that the glycol is merely an optional component of the glycol crosslinking agent, see claims 1 and 6 of Jewell et al ('706), which patent is based on the continuation application that matured into the ('278) patent. Claim 1 claims only glyoxal and claim 6 claims the combination of glyoxal and glycol which clearly supports and shows that Jewell et al disclose the use of glyoxal as a single crosslinking agent.

2. Claims 4,5,8,11,12,14,17,18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jewell et al (6,207,278) and if necessary Jewell et al (6,551,706).

Jewell et al ('278) discloses time and temperature of curing for glyoxal and glycol crosslinking of the cellulose fibers. Time and temperature of curing are process effective parameters to achieve the requisite wet bulk that is preferably greater than about 25 cc/g at 0.6 kPa. Thus, it would have been obvious to employ the claimed curing temperature and time for crosslink cellulose fibers using glyoxal as the sole

crosslinking agent since it is merely optimization of process effective parameters to achieve the desired wet bulk. As to the claimed brightness in claims 8, 14 and 20, this limitation is merely a reflection of the use of bleached pulp, which is one type of pulp taught by Jewell et al. Thus it would have been obvious to employ a bleached pulp and the ISO value would depend on the type of product or article the crosslinked pulp will be used for.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Chin whose telephone number is (571) 272-1186. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



PETER CHIN  
PRIMARY EXAMINER